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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,683	03/26/2004	Hiroyuki Baba	SAT 201	7868

23995 7590 05/20/2005

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WASHINGTON, DC 20005

EXAMINER
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UNDERWOOD, DONALD W

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/809,683

Applicant(s)

BABA, HIROYUKI

Examiner

Donald Underwood

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 032604.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **Detailed Action**

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, it appears "attracting" in the last line should be --attract--.

Regarding claim 7, it is unclear what action is intended by the phrase "pressuring toward" in line 6 and "for accelerating the attraction" in the last line. Clarification is required. Also "a", first occurrence, in line 7 should be --an--.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIlwraith et al in view of Izumida and Suzuki et al.

McIlwraith teaches using a Bernouli pickup to move a circuit board for transfer.

See McIlwraith paragraph 0018.

Izumida teaches moving a circuit board to an exact location.

Suzuki teaches supplying an article to an exact pickup position and then picking it up for transfer.

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It would have been obvious to provide a conveyor for moving circuit boards as taught by Izumida to the transfer device in McIlwraith in view of the teaching in Suzuki to provide a supply device for a transfer device.

Regarding the controller in claim 1, it would further have been obvious to correlate the movement between the conveyor and pickup in McIlwraith as modified by Izumida in view of the teaching in Suzuki.

Regarding claim 5, at the end of the transporting path by the conveyor added to McIlwraith the speed of translation of the board is zero as is the speed of the pickup until the pickup is complete and the pickup moves the board away. Note this claim does not require constant overlapping movement of the pickup and transporter.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIlwraith et al in view of Izumida and Suzuki et al as applied to claim 1 above, and further in view of the following comments.

It would have been obvious to provide a pushing-up portion in the conveyor in Izumida to provide assistance to the pickup function in view of the teaching in Suzuki (element 10). Note the pushing-up portion would be activated once the board in Izumida was detected since activation prior to detection would obviate the need for pushing-up.

6. Thurman teaches correlating the speed between two horizontally translating conveyors.

7. Any inquiry concerning this communication should be directed to D. Underwood at telephone number 571-272-6933.

Underwood/vs  
May 12, 2005

*Donald W. Underwood* 05/17/05  
**DONALD W. UNDERWOOD**  
**PRIMARY EXAMINER**